

*West Virginia Department of Environmental Protection
Division of Air Quality*

Joe Manchin, III
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
**U.S. Silica Company
Berkeley Springs Plant
R30-06500001-2008**

John A. Benedict
Director

*Issued: December 30, 2008 • Effective: January 13, 2009
Expiration: December 30, 2013 • Renewal Application Due: June 30, 2013*

Permit Number: **R30-06500001-2008**
Permittee: **U.S. Silica Company**
Facility Name: Berkeley Springs Plant
Permittee Mailing Address: P.O. Box 187, Berkeley Springs, WV 25411

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Berkeley Springs, Morgan County, West Virginia
Facility Mailing Address:	P.O. Box 187, Berkeley Springs, WV 25411
Telephone Number:	(304) 258-2500
Type of Business Entity:	Corporation
Facility Description:	Silica Sand Processing Plant
SIC Codes:	1446
UTM Coordinates:	739.59 Easting • 4,393.48 km Northing • Zone 17

Permit Writer: U.K.Bachhawat

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1 Emission Units

Emission Unit ID <small>(1,2,3)</small>	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/ Modified	Control Device ⁽⁵⁾
			TPH	TPY x 10 ⁶		
Primary Crushing Plant						
VIBFD1	T1, T2	Primary Crusher Feed Bin and Vibratory Feeder	1000	8.8	Pre - 1970	MD, IMC
CRUSH 2	Stack # 1	4' Jaw Crusher	800	7	Pre- 1970	Bldg # 3, CF # 1-Torit DF-T4-32
CONV3	Stack # 1	42" Short Belt under primary crusher	800	7	Pre-1970	IMC, BE (Bldg. #3), particle size, CF # 1-Torit DF-T4-32
CONV 2	Stack # 1	42" Incline Belt	800	7	Pre-1970	IMC, BE (Bldg. #3), particle size, CF # 1-Torit DF-T4-32
CONV1	T3	42" Stacker Belt to Reclaim Stockpile	800	7	Pre-1970	PE, particle size. IMC
Reclaim Stockpile	Reclaim Stockpile	Reclaim Stockpile	800	7	Pre-1970	PE, particle size. IMC
Secondary Crushing Plant						
VIBFD2	N/A	Vibratory Feeders # 1 thru # 5 in reclaim tunnel	400	3.5	Pre-1970	Tunnel enclosure, IMC, particle size
CONV4	N/A	36" Reclaim Conveyor	400	3.5	Pre-1970	Tunnel enclosure, IMC, particle size
CONV5	N/A	42" Conveyor to Secondary Crusher	400	3.5	Pre- 1970	Full Enclosure, BE (Bldg. #5), IMC, particle size
CRUSH 3	Stack # 2	Symons Secondary Crusher and Surge Bin	400	3.5	Pre- 1970	Full Enclosure, BE (Bldg. #5), IMC, particle size Wsc # 2 Sly Impinjet 270
CONV 6	N/A	36 " discharge conveyor from Secondary Crusher (# 1 Stone Tank transfer conveyor)	400	3.5	Pre-1970	FE, IMC, BE (Bldg. #5)
CONV 7	N/A	30" Short Transfer Conveyor	400	3.5	Pre-1970	FE, IMC, BE (Bldg. #5)
CONV 8	T4	#2 Stone Tank	400	3.5	Pre-1970	FE, IMC
Wet Processing Plant (Rod Mill Building)						
CONV12	N/A	24" #2 Stone Tank discharge conveyor C-1	200	1.75	Pre-1970	FE, BE (Bldg. #4), IMC
CONV13	N/A	24" Conveyor C-2	200	1.75	Pre-1970	FE, BE (Bldg. #4), IMC
CONV14	N/A	24" Conveyor C-3	200	1.75	Pre-1970	FE, BE (Bldg. #4), IMC
MILL1	N/A	Hardinge Rod Mill	200	1.75	Pre-1970	FE, BE (Bldg. #4), SS
CONV15	N/A	18" conveyor C-4 to Rod Mill tailings	150	1.3	Pre-1970	SS

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SCREN 1	N/A	Ty Speed 8x20 Screening Machine	200	1.75	Pre-1970	FE, BE (Bldg. #4), SS
TANK 2	N/A	Vessels,Bins,tanks and slurry boxes in Rod Mill Building	200	1.75	Pre-1970	FE, BE (Bldg. #4), SS
WETSE1 thru WETSE5	N/A	#1-#5 Linatex Separators	200	1.75	Pre-1970	FE, BE (Bldg. #4), SS
FERRO1	N/A	Ferro Filters	200	1.75	Pre-1970	SS
CLASS4/5 and 7	N/A	Hydrosizers	200	1.75	Pre-1970	SS
FCell	N/A	Outokumpo Flotation Cells	160	1.40	2004	SS
CONV54	N/A	Feed conveyor to Denver Ball Mill	50	0.44	2000	FE, BE (Bldg. #4), Damp Sand
MILL 8	N/A	Denver 4' X 8" Ball Mill	50	0.44	2000	FE, BE (Bldg. #4), Damp Sand
PIPE 1	N/A	Wet Process Sand Slurry Piping	50	0.44	Pre-1970	SS
CONV 18	N/A	30" Stationary Conveyor in Fluid Bed Drain Shed (Bldg. #6)	200	1.75	Pre-1970	SS
CONV 17 and CONV 19	N/A	30" Shuttle Conveyors in Fluid Bed Drain Shed	200	1.75	Pre-1970	FE, Bldg # 6, SS
CONV 20 & CONV 22	N/A	30" F-1 feed hopper conveyor and 30" F-2 feed hopper conveyor	200	1.75	1975	FE, Bldg # 6
CONV 21	T5	24" C-1 outside conveyor	200	1.75	1975	PE
CONV 23	T6	24" C-2 outside conveyor	200	1.75	1975	PE
CONV 24	T7	24" C-3 conveyor	200	1.75	1975	FE
VIBFD4	T8	Fluid Bed Dryer vibratory feeder	200	1.75	1975	FE
DRYER 1 (3S)	Stack # 3	Fluid Bed Dryer - 71 MMBtu/hr	200	1.75	1975	WSc#3 Sly Impinjet Model 1130
CONV 25	Stack # 25	30" C-4 tunnel conveyor	200	1.75	1975	Cartridge Filter # 25 Torit DF-4DF-48
SCREN16	Stack # 25	Tyler Ty-Speed shaker screen	200	1.75	1995	Cartridge Filter # 25 Torit DF-4DF-48
Screening and Uground Sand Processing						
CONV26	Stack # 25	24" #3 dryer conveyor	200	1.75	Pre-1975	FE, CF #25-Torit DF-4DF-48
CONV 27	Stack # 25	24" #2 tunnel conveyor	200	1.75	Pre-1975	FE, CF #25-Torit DF-4DF-48
ELEV 4	Stack # 6	Elevator #1	200	1.75	Pre-1975	FE , Bldg. #7, CF #6-Torit M/N 2DFA-155
VIBFD5	Stack # 6	Grasshopper Vibrating Feeder	200	1.75	1973	Totally enclosed, equipment also enclosed in Bldg. #7, CF #6-Torit M/N 2DFA-155
CONV 39-41	Stack # 6	#1 to #3 Magnet Rolls	200	1.75	Pre-1975	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #6-Torit M/N 2DFA-155

Emission Unit ID ^(1,2,3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾
			TPH	TPY x 10 ⁶		
SCREN 7-9,14-15 (1E)	Stack # 36	#1 to #5 Rotex Screens (1S-5S)	375	0.65	1995-1997	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, CF #36-Torit DF-T2-8 (1C)
CONV 30	Stack # 6	20" Tailings Conveyor	30	0.263	Pre-1975	FE (Bldg. #7), CF #6-Torit M/N 2DFA-155
CONV 29	Stack # 6	# 1 Dry sand conveyor	175	1.533	Pre-1975	FE (Bldg. #7), CF #6-Torit M/N 2DFA-155
ELEV 2	Stack # 7	#3 Elevator	30	0.263	Pre-1975	FE (Bldg. #7), M/N DFT4-32-SH Cartridge Filter
ELEV 1	Stack # 7	#2 Elevator	75	0.66	Pre-1975	FE (Bldg. #7), M/N DFT4-32-SH Cartridge Filter
ELEV 3	Stack # 7	#4 Elevator	75	0.66	Pre-1975	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, M/N DFT4-32-SH Cartridge Filter
SCREN 10-13 and SCREN 2-4	Stack # 7	# 71 thru #74 Rotex Screens and Tyler Shaker and Hummer Machines (#'s 63-66 and #51)	75	0.66	Modified 1996 Pre-1975	Chutes and piping are totally enclosed, equipment also enclosed in Bldg. #7, M/N DFT4-32-SH Cartridge Filter
CONV 31	Stack # 7	24" #9 and #10 Tank conveyor	75	0.66	Pre-1975	Chutes and piping are totally enclosed , FE (Bldg. #7), M/N DFT4-32-SH Cartridge Filter
CONV32	N/A	24" #11 and #12 Tank conveyor	75	0.66	Pre-1975	Chutes and piping are totally enclosed, Building Enclosure #7
CONV36	N/A	20" C-10 conveyor	110	0.96	Pre-1975	Chutes and piping are totally enclosed, Building Enclosure #7
CONV 37	N/A	20" C-11 conveyor belt	110	0.96	Pre-1975	FE, BE (Bldg # 7)
CONV33	Stack # 7	24" #1 Pulverizer Tank belt conveyor	200	1.75	Pre-1975	FE (Bldg. #7), M/N DFT4-32-SH Cartridge Filter
CONV34	N/A	24" #2 Pulverizer Tank belt conveyor	200	1.75	Pre-1975	FE
CONV 51	Stack # 27	24" 30 mesh loadout conveyor	200	1.75	Pre-1975	FE, CF #27-Torit DF-T2-8
PACKR1	Stack # 40	Packaging machine for unground sand	200	1.75	Pre-1975	Piping is totally enclosed, BE , CF #40-Torit DF-T2-8
Milling Process						
Pulverizer Tank #19	Stack # 27	Feed Silo for #1-#4 pebble mills	150	1.32	Pre-1970	FE, CF#27-Torit DF-T2-8
SCREW3	Stack # 10	1-2 Screw Conveyor	30	0.26	Pre-1970	FE, BE, CF#10-Mikropul CFH 40T-20-B
SCREW5	Stack # 11	Cross Conveyor	30	0.26	Pre-1970	FE, BE, CF#11-Mikropul CFH 40T-20-B
SCREW4	Stack # 11 and Stack # 10 (2 Collection Points)	3-4 Screw Conveyor	30	0.26	Pre-1970	FE, BE, CF#11-Mikropul CFH 40T-20-B, and CF#10-Mikropul CFH 40T-20-B
#1 Mill Feed Bin	Stack # 10	#1 Mill Feed Bin	100	0.88	Pre-1970	FE, BE, CF#10-Mikropul CFH 40T-20-B
#2 Mill Feed Bin	Stack # 10	#2 Mill Feed Bin	100	0.88	Pre-1970	FE, BE, CF#10-Mikropul CFH 40T-20-B
#3 Mill Feed Bin	Stack # 11	#3 Mill Feed Bin	100	0.88	Pre-1970	FE, BE, CF#11-Mikropul CFH 40T-20-B

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#4 Mill Feed Bin	Stack # 11	#4 Mill Feed Bin	100	0.88	Pre-1970	FE, BE, CF#11-Mikropul CFH 40T-20-B
FEEDB1	Stack # 10	Feeder Belt for #1 Pebble Mill	15	0.13	Pre-1970	FE, BE, CF#10-Mikropul CFH 40T-20-B
FEEDB2	Stack # 10	Feeder Belt for #2 Pebble Mill	15	0.13	Pre-1970	FE, BE, CF#10-Mikropul CFH 40T-20-B
FEEDB3	Stack # 11	Feeder Belt for #3 Pebble Mill	15	0.13	Pre-1970	FE, BE, CF#11-Mikropul CFH 40T-20-B
FEEDB4	Stack # 11	Feeder Belt for #4 Pebble Mill	15	0.13	Pre-1970	FE, BE, CF#11-Mikropul CFH 40T-20-B
MILL2	N/A	#1 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11)
MILL3	N/A	#2 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11)
MILL4	N/A	#3 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11)
MILL5	N/A	#4 Pebble Mill	100	0.88	Pre-1970	FE, BE (Bldg#11)
SCREW6	Stack # 10	Screw Conveyor for #1 Mill discharge	100	0.88	Pre-1970	FE, BE, CF #10-Mikropul CFH 40T-20-B
AIRSD7	Stack # 10	Airslide for #2 Mill discharge	100	0.88	Pre-1970	FE, BE, CF #10-Mikropul CFH 40T-20-B
SCREW7	Stack # 11	Screw Conveyor for #3 Mill discharge	100	0.88	Pre-1970	FE, BE, CF #11-Mikropul CFH 40T-20-B
AIRSD8	Stack # 11	Airslide for #4 Mill discharge	100	0.88	Pre-1970	FE, BE, CF #11-Mikropul CFH 40T-20-B
ELEV 6	Stack # 10	# 1 Mill Elevator	100	0.88	Pre-1970	FE, BE, CF #10-Mikropul CFH 40T-20-B
ELEV 7	Stack # 10	# 2 Mill Elevator	100	0.88	Pre-1970	FE, BE, CF #10-Mikropul CFH 40T-20-B
ELEV 8	Stack # 11	# 3 Mill Elevator	100	0.88	Pre-1970	FE, BE, CF #11-Mikropul CFH 40T-20-B
ELEV 9	Stack # 11	# 4 Mill Elevator	100	0.88	Pre-1970	FE, BE, CF #11-Mikropul CFH 40T-20-B
AIRSE 1	N/A	#1 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg # 11)
AIRSE 2	N/A	#2 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg # 11)
AIRSE 3	N/A	#3 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg # 11)
AIRSE 4	N/A	#4 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg # 11)
AIRSD9	N/A	Airslide For #1 Separator Feed	100	0.88	Pre-1970	BE, FE (Bldg # 11)
SCREW16	N/A	#3 Separator Screw Conveyor	100	0.88	Pre-1970	BE, FE (Bldg # 11)
SCREW17	N/A	#4 Separator Screw Conveyor	100	0.88	Pre-1970	BE, FE (Bldg # 11)
ELEV14	Stack # 39	#14 Elevator	150	1.32	Pre-1970	BE, FE, CF #39-Mikropul 8-20-V

Emission Unit ID ^(1,2,3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾
			TPH	TPY x 10 ⁶		
Pulverizer Tank # 20	Stack # 27	Feed Silo for #5 and #6 pebble mills	150	1.32	Pre-1970	BE, FE, CF #27 (Torit DF-T2-8)
#5 Mill Feed Bin	Stack # 12	#5 Mill Feed Bin	100	0.88	Pre-1970	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
FEEDB5	Stack # 12	#5 Mill Feeder Belt	15	0.13	Pre-1970	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
MILL6	Stack # 12	#5 Pebble Mill	100	0.88	Pre-1970	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
AIRSD 2	N/A	Airslide discharge for #5 Mill	100	0.88	Pre-1970	BE (Bldg # 11), FE
ELEV10	Stack # 12	#5 Mill Elevator	100	0.88	Pre-1970	BE, FE, CF #12-(Mikropul CFH 40T-20-B)
AIRSE 5	N/A	#5 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg # 11)
SCREW18	N/A	Screw Conveyor for #5 Air Separator	100	0.88	Pre-1970	BE, FE (Bldg # 11)
#6 Mill Feed Bin	Stack # 12	#6 Mill Feed Bin	100	0.88	Pre-1970	BE, FE, CF #12 (Mikropul CFH 40T-20-B)
FEEDB6	Stack # 12	#6 Mill Feeder Belt	15	0.13	Pre-1970	BE, FE, CF #12 (Mikropul CFH 40T-20-B)
MILL7	N/A	#6 Pebble Mill	100	0.88	Pre-1970	BE, FE (Bldg #11)
AIRSD 3	Stack # 12	Airslide discharge for #6 Mill	100	0.88	Pre-1970	BE, FE, CF # 12 Mikropul CFH 40T-20-B
ELEV11	Stack # 12	#6 Mill Elevator	100	0.88	Pre-1970	BE, FE, CF #12 Mikropul CFH 40T-20-B
AIRSE 6	N/A	#6 Air Separator	100	0.88	Pre-1970	BE (Bldg # 11), FE
SCREW19	N/A	Screw Conveyor for #6 Air Separator	100	0.88	Pre-1970	BE (Bldg # 11), FE
Microsizer #3	Stack #41	MS-20 Microsizer #3	25	0.219	2005	Torit M/N DFT 2-4-155 (2C)
BFI	Stack #41	Belt Feeder for Microsizer #3	20	0.175	2005	Torit M/N DFT 2-4-155 (2C)
BE1	Stack #41	Ground Fine	20	0.175	2005	Torit M/N DFT 2-4-155 (2C)
BE2	Stack #41	CGS Elevator # 2	20	0.175	2005	Torit M/N DFT 2-4-155 (2C)
Screen 21	Stack #41	CGS Rotex Screen	25	0.22	2005	Torit M/N DFT 2-4-155 (2C)
AS2	Stack #41	Airslide 2 for Ground Fine	20	0.175	2005	Torit M/N DFT 2-4-155 (2C)
AS3	Stack #41	Airslide3 for Ground Fine	20	0.175	2005	Torit M/N DFT 2-4-155 (2C)
IS1	Stack #41	Impact Scale	20	0.175	2005	Torit M/N DFT 2-4-155 (2C)
Airslide 100	Stack #41	Airslide (2s) for CGS	8	0.07	2005	Torit M/N DFT2-4-155(2C)
Airslide 200	Stack #41	Airslide (3s) for CGS	8	0.07	2005	Torit M/N DFT2-4-155(2C)
Surge Hopper (#3 Microsizer)	Stack #41	Surge Hopper (4s) for #3 Microsizer	8	0.07	2005	Torit M/N DFT2-4-155(2C)

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			TPH	TPY x 10 ⁶		
Tech Air Pumping Station	Stacks #28 and #29	Pneumatic Pumping Station (5s) for #3 Microsizer	8	0.07	2005	CF #28 Torit M/N DF-2D-F4 and CF #29 Mikropul 8204B (3C)
Classification (10/15/30/40 Micron)						
PNEU2	Stack # 12	#1 Macawber Pneumatic Pumping Stations	15	0.13	1996	BE, FE, CF # 11 Mikropul CFH 40T-20-B
PNEU4	Stack # 11	#2 Macawber Pneumatic Pumping Stations	15	0.13	1996	BE, FE, CF # 11 Mikropul CFH 40T-20-B
BIN7	Stack # 12	#1 & #2 Pump Feed Bins	15	0.13	Pre-1975	BE, FE, CF # 12 Mikropul CFH 40T-20-B
#1 & #2 pumps	Stack # 12	#1 & #2 pneumatic pumps	15	0.13	1996	BE, FE, CF # 12 Mikropul CFH 40T-20-B
#1 Microsizer Feed Bins	Stack # 11	#1 Microsizer feed bin	100	0.88	1992	BE, FE, CF # 11 Mikropul CFH 40T-20-B
#2 Microsizer Feed Bins	Stack # 12	#2 Microsizer feed bin	100	0.88	1992	BE, FE, CF # 12 Mikropul CFH 40T-20-B
AIRSI 12	Stack # 11	Airslide from #1 Microsizers	85	0.75	1996	BE(Bldg # 13), FE, CF # 11 Mikropul CFH 40T-20-B
AIRSI 13	Stack # 12	Airslide from #2 Microsizers	85	0.75	1996	BE (Bldg # 13), FE, CF # 12 Mikropul CFH 40T-20-B
Tailing Bins	Stack # 12	Tailing Bins	130	1.14	Pre-1975	BE, FE, CF #12 (Mikropul CFH 40T-20-B)
5 Micron Classification						
ELEV16	Stack # 11	5 Micron Feed Elevator (7S)	150	1.32	1996	BE, FE, CF #11 (Mikropul CFH 40T-20-B)
5 Micron Feed Bin	Stack # 37	5 Micron Feed Bin (6S)	150	1.32	1996	BE, FE, CF #37(Mikropul M/N CFH-8-20 (1D))
AIRSE 8-16, 18-19	N/A	Air Separators	20	0.18	1973	BE (Bldg # 12), FE
ELEV 17	Stack # 37	5 Micron Return Elevator (8S)	150	1.32	1996	BE, FE, CF #37(Mikropul M/N CFH-8-20 (1D))
BIN 5	Stack # 37	5 Micron Product Feed Bin (1S)	10	0.09	1996	BE, FE,CF # 37 (Mikropul M/N CFH –8-20(1D))
BIN 4	Stack # 38	Bulk Storage Loading Bin (2S)	10	0.09	1996	CF #38(Mikropul M/N CFH 18-20-V-B (1C))
“Stone Container” Bagger Bin	Stack # 38	“Stone Container” Bagger Bin (4S)	15	0.13	1996	BE, FE, CF #38(Mikropul M/N CFH 18-20-V-B (1C))
PACKR 7	Stack # 38	“Stone Container” Bagger (5S)	15	0.13	1996	BE, FE, CF #38(Mikropul M/N CFH 18-20-V-B (1C))
PEMCO Elevator	Stack # 13	Elevator Pemco/FCP Tanks, Pemco elevator and bulk loadout spout (3S)	150	1.32	Pre 1983	FE, CF #13 (Torit DF-T3-24)
PACKR 4	Stack # 20	#2 Autobagger and feed Bin	20	0.18	1981	Full Enclosure Bldg. #14 BE, CF #20 (Torit DF-T4-16)
PACKR 3	Stack # 20	#1 Autobagger and feed Bin CF #20 – Torit Fabric Filter. Model No. 4DF32-55	20	0.18	1981	Full Enclosure Bldg. #14 BE, CF #20 (Torit DF-T4-16)
PACKR 5 (1e & 2e)	Stack # 34	Bulk Bagger and Feed Bin (1s and 2s)	15	0.13	1988	Full Enclosure Bldg. #14 BE, CF #34 (Torit DF-2D-F4 (1c))
Wet Float Plant						
Slurry Pumps	N/A	Slurry Pumps	25	0.22	Pre-1948	SS

Emission Unit ID ^(1,2,3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾
			TPH	TPY x 10 ⁶		
CYCLO 4 and CYCLO 5	N/A	#1 & #2 Wet Cyclones	25	0.22	Pre-1948	SS
FERRO 2	N/A	Ferro Filters	25	0.22	Pre-1948	SS
CYCLO 3	N/A	#4 Wet Cyclone	25	0.22	Pre-1948	SS
Drain Shed	N/A	Drain Shed	25	0.22	Pre-1948	SS SS
CONV46	N/A	24" Conveyor Belt	25	0.22	Pre-1970	SS
CONV47	N/A	24" Long Conveyor Belt	25	0.22	Pre-1970	SS
CLASS 5	N/A	Rake Classifier	25	0.22	Pre-1970	BE,SS
Conditioner	N/A	Conditioner	25	0.22	Pre-1970	BE,SS
Floatation	N/A	Floatation	25	0.22	Pre-1970	BE (Bldg # 16),SS
Vacuum Table	N/A	Vacuum Table	25	0.22	Pre-1970	BE (Bldg # 16),MC
CONV 48	N/A	18" Thrower Conveyor Belt	25	0.22	Pre-1970	BE (Bldg # 16),MC
CONV 50	N/A	30" Damp Loadout Conveyor Belt	25	0.22	Pre-1970	BE (Bldg # 17),MC
CONV 49	N/A	24" Conveyor	25	0.22	Pre-1970	BE (Bldg # 17),MC
DRYER 2 (8S)	Stack # 8	Rotary Dryer 17.1 mmBTUH	25	0.22	Pre-1970	BE, FE, WSc #8 (Homemade)
SCREW21	N/A	#1 Screw Conveyor	25	0.22	Pre-1970	BE (Bldg # 17),FE
ELEV 19	Stack # 9	#1 Elevator	25	0.22	Pre-1970	BE, FE CF #9 (Torit 4 DFT 32-155)
SCREN 17 (1E)	Stack # 9	#1 Rotex Screen (1S)	50	0.22	1999	BE, FE CF #9 (Torit 4 DFT 32-155)
SCREN 18 (1E)	Stack # 9	#2 Rotex Screen (2S)	50	0.22	1999	BE, FE CF #9 (Torit 4 DFT 32-155)
SCREW22	N/A	#2 Screw Conveyor	25	0.22	Pre-1970	BE (Bldg # 17), FE
ELEV 20	Stack # 9	#2 Elevator	25	0.22	Pre-1970	FE, CF #9 (Torit 4 DFT 32-155)
PACKR8 (1E)	Stack # 9	BFS Bulk Bagger	30	0.22	1998	FE, CF #9 (Torit 4 DFT 32-155)
Storage Structures						
Tank #7 and Tank #8	Stack # 6	Storage Tanks #7 and #8 at the New Screen Tower	150 Tons Each		Pre-1948	MD, CF # 6 (Torit 4DF-48)
Tanks #8 and #13	Stack # 7	Storage tanks #8 and #13 at the New Screen Tower	150 Tons Each		Pre-1970	particle size, PE, CF#7 M/N DFT-32-SH
Tanks #9 - #12	Stack # 27	Storage tanks #9-#12 at the New Screen Tower	150 Tons Each		Pre-1970	particle size, PE, MD, CF # 27 (Torit DF-T2-8)

Emission Unit ID ^(1,2,3)	Emission Point ID	Emission Unit Description ⁽⁴⁾	Design Capacity		Year Installed/Modified	Control Device ⁽⁵⁾
			TPH	TPY x 10 ⁶		
Tanks #14-#18	N/A	Storage tanks #14 and #18 at the New Screen Tower	150 Tons Each		Pre-1970	particle size, PE, MD
Steel Tank #21	Stack # 27	Steel Tank at the New Screen Tower	100 Tons		Pre-1970	particle size, PE, MD, CF # 27 (Torit DF-T2-8)
FCP Tank	Stack # 13	FCP Tank	800 Tons		1998	FE, CF#13 (Torit DF-T3-24)
PEMCO Tank	Stack # 13	PEMCO Tank	250 Tons		Pre 1983	FE, CF#13 (Torit DF-T3-24)
Supersil storage silos #1-#4 (1e-4e)	Stack # 33	#1-#4 Silos	125 Tons Each		1984	FE, CF # 33 (Torit DF-T4-16)
Minusil storage silo #5 (5e)	Stack # 29	# 5 Silo	125 Tons		1984	FE, CF#29 (Mikropul CFH-18-20-VB)
Minusil storage silos #6,#7and #8(6eand E1)	Stack # 28	# 6, #7 and #8 Silos	100 Tons Each		1984 1999	FE, CF#28 (Torit DF-2D-F4)
Concrete storage tank	Stack # 9	Concrete Tank at the Float Plant	100 Tons		Pre-1970	FE, CF#9 (Torit4DF-32-155)
Steel storage tank	Stack # 9	Steel Tank at the Float Plant	100 Tons		Pre-1970	FE, CF#9 (Torit4DF-32-155)
SPOUT1	Stack # 27	30 mesh loadout spout (SPOUT1)	150		Pre-1970	PE, MD, CF#27 (Torit DF-T2-8)
SPOUT2	Stack # 27	Dry sand loadout spout (SPOUT2)	150		Pre-1970	PE, MD, CF#27 (Torit DF-T2-8)
SPOUT3	Stack # 27	DCL loadout spout (SPOUT3)	200		Pre-1970	PE, MD, CF#27 (Torit DF-T2-8)
SPOUT4	Stack # 9	Float Plant loadout spout (SPOUT4)	150		Pre-1970	PE, MD, CF#9 (Torit4DF-32-155)
SPOUT5	Stack # 28	10 Micron loadout chute (SPOUT5)	150		Pre-1970	PE, MD, CF#28 (Torit DF-2D-F4)
SPOUT6	Stack # 13	Pemco/DCL loadout system (SPOUT6)	250		Pre-1970	PE, MD, CF#13 (Torit DF-T3-24)
Q ROK SPOUTS	Stack #6	Q ROK Bulk Loading Spouts	150		Pre-1970	CF #6-Torit M/N 2DFA-155
Roads	N/A	Unpaved quarry haul roads and paved and unpaved plant roadways			Pre-1970	WT
Golf Sand Stockpile	N/A	Stockpile				Particle Size, MD
Float Sand Stockpile	N/A	Stockpile				Particle Size, MD

Source ID	Equipment Description/Location	Design Capacity (Gallons)	Year Installed/Modified
Tank No. 1	Diesel Fuel Tank	10,000	Before 1976
Tank No. 2	Used Oil Tank at Maintenance garage	275	Before 1976
Tank No. 3	Used Oil Tank at Maintenance garage	275	Before 1976
Tank No. 4	# 1 Oil Tank at Maintenance garage	275	Before 1976
Tank No. 5	# 2 Oil Tank at Maintenance garage	275	Before 1976
Tank No. 6	# 3 Oil Tank at Maintenance garage	275	Before 1976
Tank No. 7	# 4 Oil Tank at Maintenance garage	275	Before 1976
Tank No. 8	Recycled Oil Tank near Float Plant	100,000	1975
Tank No. 11	Kerosene Tank at C & R Shop	275	1995

Source ID	Equipment Description/Location	Design Capacity (Gallons)	Year Installed/Modified
Tank No. 12	Gasoline Tank at Office Building	1000	1995
Tank No. 13	Lube Oil Tank at Secondary Crusher	300	Before 1976
Tank No. 24	Petroleum Sulfonate (Conditioner) Tank at Float Plant	275	Before 1976
Tank No. 25	Two Propane Tanks at the electric shop	30,000 each	Before 1976
Tank No. 26	Propane Tank at the Quarry	2,000	1999
Tank No. 27	Propane Tank at #6 Oil Building	1,000	Before 1976
Tank No. 28	Two Propane Tanks at the C&R Shop	1,000 Gallons each	Before 1976
Tank No. 16	Recycled Oil	30,000 Gallons	2003
Tank No. 17	Recycled Oil	30,000 Gallons	2003

Notes: (1) If Emission Point ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1e, 2e,)
 (2) Emission Points are identified by U.S. Silica internal inventory ID system
 (3) Emission Points are also identified by U.S. Silica stack ID numbering system
 (4) If Source ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1s, 2s,)
 (5) If Control equipment ID is issued in an R-13 permit, it is provided in the Table, (i.e., 1c, 2c,)

Abbreviations:

FE=Full Enclosure, PE=Partial Enclosure, BE=Building Enclosure, T=Tunnel or Underground, IMC=Inherent Moisture Content(1-5%), MC=Moisture Content, SS=Saturated Sand(60%moisture), WS=Water Spray, WT=Water Truck, MD=Minimized Drop Height, EL=Enclosed Loading Station, WSc=Wet Scrubber, CF=Cartridge Filter

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2595	September 20, 2004
R13-0715F	December 11, 2003
R13-750	June 14, 1984
R13-1970	August 13, 1997
R13-991	April 12, 1988
R13-1917	December 22, 1995
R13-2015BC	September 19, 2003 November 20, 2009
R13-2145B	August 29, 2003
R13-2423A	August 29, 2003
R13-2299A	August 29, 2003

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NO_x	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance
CEM	Continuous Emission Monitor		Standards
CES	Certified Emission Statement	PM	Particulate Matter
C.F.R. or CFR	Code of Federal Regulations	PM₁₀	Particulate Matter less than
CO	Carbon Monoxide		10µm in diameter
C.S.R. or CSR	Codes of State Rules	pph	Pounds per Hour
DAQ	Division of Air Quality	ppm	Parts per Million
DEP	Department of Environmental Protection	PSD	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	SIP	State Implementation Plan
lbs/hr or lb/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
m	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
		TSP	Total Suspended Particulate
mm	Million	USEPA	United States Environmental Protection Agency
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour	UTM	Universal Transverse Mercator
NA or N/A	Not Applicable	VEE	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically

identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. **[40 C.F.R. §61.145(b) and ~~45CSR15~~ [45CSR34](#)]**
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. **[45CSR§4-3.1 State-Enforceable only.]**
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. **[45CSR§11-5.2]**
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. **[W.Va. Code § 22-5-4(a)(14)]**
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]**

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]
- 3.1.9. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§7-3.2. **[45CSR§7-3.1] [45CSR13, R13-0715, B.3]**
- 3.1.10. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device. **[45CSR§7-3.7] [45CSR13, R13-0715, B.3]**
- 3.1.11. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of 45CSR7.
[45CSR§7-4.1] [45CSR13, R13-0715, B.3]
- 3.1.12. No person shall circumvent the provisions of this rule by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration.
[45CSR§7-4.3]
- 3.1.13. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1] [45CSR13, R13-0715, B.3]
- 3.1.14. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.
[45CSR§7-5.2] [45CSR13, R13-0715, B.3]

3.2. Monitoring Requirements

- 3.2.1. Each Process Source Operation (See Note below) with a visible emissions limit contained in this permit shall be observed visually at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions from any of the Process Source Operation are observed during these weekly observations, or at any other time, that appear to exceed the allowable visible emission requirement for the Process Source Operation, visible emissions evaluations in accordance with 45CSR7A shall be conducted as soon as practicable, but no later than one month from the time of the observation. A visible emissions evaluations in accordance with 45CSR7A shall not be required under condition Section 3.2.1 if the visible emissions condition is corrected in a timely manner; the Process Source Operation is operating at normal operating conditions; and, the cause and corrective measures taken are recorded. **[45CSR§30-5.1.c.]**

- 3.2.2. If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of the allowable visible emission requirements for a given Process Source Operation, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 45CSR7A. If subsequent visible emissions evaluations indicate visible emissions less than the allowable visible emission requirement for the Process Source Operation for three consecutive evaluation periods, the Process Source Operation may comply with the visible emissions testing requirements of condition 3.2.1 in lieu of those established in this condition. **[45CSR§30-5.1.c.]**
- 3.2.3. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems monthly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.
- Preventive maintenance inspections of potential fugitive dust sources, such as outdoor conveying systems, transfer points, and bulk loadouts will be conducted on a periodic basis by operations personnel. This is in addition to the monthly inspections required above.
- Parking lots, roadways, other vehicle travel areas, and storage piles will be regularly observed by trained personnel to determine the need for fugitive dust control. A water truck must be available for control of dust on roadways and parking lots on an as needed basis. The water truck will be included in the facility's preventive maintenance program. Dates of water truck usage will be provided on the Pre-Shift Inspection Reports maintained by the Quarry office.
- U.S. Silica shall keep all maintenance and preventive maintenance records via a mainframe computer system. **[45CSR§30-5.1.c.]**

Note : Process Source operations include the following : Primary Crushing Plant, Secondary Crushing Plant, Wet Processing Plant, Screening and unground sand Processing, Milling, 10/15/30/40 Micron Classification, 5 Micron Classification, Wet Float Plant & Storage Structures.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13]

- 3.3.2. Except as provided in the terms and conditions of specific emission units, the permittee shall conduct stack tests upon request by Director, establish parameter indicator ranges, and furnish the Secretary a written report of the results of such testing and established indicator ranges. The permittee shall use Method 5 or an alternative method approved by the Secretary for such testing. For wet scrubber control devices, parameter indicator ranges shall be established for the water pressure to the control equipment and the pressure loss of the inlet airflow to the scrubber. The permittee shall establish parameter indicator ranges and operate within these ranges to provide a reasonable assurance that the emission unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken. The permittee shall also record the following parameters during such testing:
 - a. Opacity readings on the exhaust stack following the procedures of 45CSR7A;
 - b. Amount of material processed;
 - c. Water pressure to the control equipment; and
 - d. Pressure loss of the inlet airflow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

These records shall be maintained on site and in accordance with 3.4.2.

[45CSR§30-5.1.c.]

- 3.3.3. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

[45CSR§7-8.1]

- 3.3.4. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. **[45CSR§7-8.2]**

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.][45CSR13, R13-0715, A.11; R13-2595, B.9]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. [45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5. below, all ~~all~~ notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3 APD Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

- 3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. N/A

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. N/A

4.0 Source-Specific Requirements [Dryers - Fluid Bed Dryer (3S), Stack # 3 and Rotary Dryer (8S), Stack # 8]

4.1. Limitations and Standards

4.1.1. The 650 HP and 450 HP spreader stoker fired boilers are permanently shutdown. Any restart or reconstruction shall require a 45CSR13 preconstruction permit.
[45CSR13, R13-0715, A.1] [3S, 8S]

4.1.2 The Fluid Bed dryer (3S) and the Rotary dryer (8S) shall burn the following fuels: propane, #2 Fuel Oil, #4 Fuel Oil, #5 Fuel Oil, #6 Fuel Oil, natural gas and Recycled Fuel Oil.
[45CSR13, R13-0715, A.2] [3S, 8S]

4.1.3 The following sulfur limits shall not be exceeded:

#2 Fuel Oil shall have a maximum of 0.2% S by weight.

#4, # 5 and #6 Fuel Oil and Recycled oil shall have a maximum of 1.5 % sulfur by weight.

[45CSR13, R13-0715, A.3] [3S, 8S]

4.1.4. Emissions from the fluid bed and rotary sand dryers shall not exceed the following hourly rates:

	Particulate Matter	SO ₂	NO _x	VOC	CO
	(lbs/hr)	(lbs/hr)	(lbs/hr)	(lbs/hr)	(lbs/hr)
Fluid Bed dryer	12.8	130.7	18.3	0.23	2.52
Rotary Dryer	9.0	26.3	3.7	0.06	0.62

[45CSR13, R13-0715, A.5] [3S, 8S]

4.1.5. Combined emissions from the Fluid Bed Dryer (3S) and Rotary Dryer (8S) shall not exceed the following annual limitations in Tons per year (TPY):

Particulate Matter – 95.48

SO₂ - 267.0

NO_x - 96.35

VOC - 1.27

CO - 13.75

[45CSR13, R13-0715, A.6] [3S, 8S]

4.1.6. The fuel rating of the recycled oil shall not exceed 150,000 BTU/gallon.

[45CSR13, R13-0715, A.7] [3S, 8S]

4.1.7. The following conditions shall be followed by the permittee for the use of Recycled Oil as dryer fuel:

- a. The registrant shall not receive, store, burn or fire any recycled oil which is considered a hazardous waste or does not meet the used oil specifications below (40 C.F.R. 279.11, Table 1 & Recycled Oil specification provided by U.S.Silica). The burning of recycled oil that does not meet these specifications shall constitute a violation of 45CSR25, 33CSR20 and the requirements, provisions, standards and conditions of this Permit.

Constituent or Property

Maximum Allowable Specification

Arsenic

<5.0 ppm

Cadmium	<2.0	ppm
Chromium	<10.0	ppm
Lead	<100.0	ppm
PCBs	<2.0	ppm
Total Halogen	<1000.0	ppm
Flash Point	>100.0	°F

- b. The registrant shall receive a chemical analysis with each shipment or delivery of recycled oil from the supplier or marketer. The analysis shall identify the name and address of the supplier or marketer, the supplier or marketer's USEPA Identification Number and the following used or recycled oil information:

- i. Date of shipment or delivery
- ii. Quantity received
- iii. Arsenic content
- iv. Cadmium content
- v. Chromium content
- vi. Lead content
- vii. PCB content
- viii. Total Halogen content
- ix. Flash point
- x. Sulfur content

- c. The Director or his or her duly authorized representative may conduct or require the permittee to conduct detailed chemical analyses of any used or recycled oil received, stored or fired in the dryer burner.
[45CSR13, R13-0715, A.9] [3S, 8S]

- 4.1.8. The permitted facility shall comply with all provisions of 45CSR10, provided that the permittee shall comply with any more stringent requirements as may be set forth under Sections 4.1.1 to 4.1.7, 4.2.1, 4.4.1 to 4.4.4 of the permit. The principal provisions of 45CSR10 are as follows:

§45-10-3.3

Maximum Allowable Emission Rates for Similar Units in All Priority III Regions Except Region IV. No person shall cause, suffer, allow, or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour, in excess of the amount determined as follows:

- (3.3.f) For Type 'b' and Type 'c' fuel burning units, the product of 3.2 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.

§45-10-3.4.a.

Unless otherwise approved by the Director, the maximum allowable emission rate for an individual stack shall not exceed by more than twenty-five percent (25%) the emission rate determined by prorating the total allowable emission rate based on the basis of individual unit heat input at design capacity for all fuel burning units discharging through that stack.

§45-10-4.1.

No person shall cause, suffer, allow, or permit, the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations.

§45-10-8.2.a.

At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of this rule. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this rule.

[45CSR13, R13-0715, B.4] [3S, 8S]

- 4.1.9. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of sections 45CSR§§10-3, 4 or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

[45CSR§10-8.1a] [3S, 8S]

- 4.1.10. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in section 45CSR§10-3.

[45CSR§10-8.1b] [3S, 8S]

- 4.1.11. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with sections 45CSR§§10-3, 4 and 5 of this rule by testing and /or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.

[45CSR§10-8.2c] [3S, 8S]

- 4.1.12. Monitoring plans pursuant to subsection 45CSR§10-8.2.c shall be submitted to the Director within six (6) months of the effective date of this rule. Approval or denial of such plans shall be within twelve (12) months of the effective date of this rule. (Monitoring Plan approved on April 25, 2003. Compliance with terms and conditions of 45CSR13, R13-0715F assures compliance with 45CSR10 and 10A)

[45CSR§10-8.2.c.2] [3S, 8S]

- 4.1.13. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to sections 45CSR§§10-3, 4 or 5 shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to subdivision 45CSR§10-8.2.c. Such records shall be made available to the

Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.

[45CSR§10-8.3.a.] [3S, 8S]

- 4.1.14. The owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§10-8.3.b.] [3S, 8S]

- 4.1.15. The following scrubber pressure drop ranges obtained from stack test and historical data are an indicator of compliance for the scrubber to attain the required minimum particulate removal efficiency. Scrubber pressure drop shall be monitored at least once per day. An excursion shall be defined as when the scrubber pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the scrubber and corrective actions shall be taken to return the pressure drop within the following range:

	Control device	Indicator Range for Pressure Drop (in H ₂ O)
Fluid Bed Dryer (3S)	Sly Impinjet 1130 Wet Scrubber	2.0 to 5.8
Rotary Dryer (8S)	Homemade Wet Scrubber	0.5 to 2.0

According to the CAM plan submitted, the pressure gauges on the scrubbers shall be operated continuously during operation of the dryers.

[40 C.F.R. §64.3(a)(2)] [3S, 8S]

4.2. Monitoring Requirements

- 4.2.1. Compliance with Section 3 of 45CSR7 shall be determined by conducting daily visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for the scrubber. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation as outlined in 45CSR7A-2.1.a,b, within 24 hours. A 45CSR7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions with no visible emissions being observed. Records shall be maintained on site reporting the results of each test. Said opacity evaluations of sources identified during the Method 22 survey shall only be conducted by an employee or contractor certified in 40CFR60 Appendix A, Method 9, Visible Emission observations. Upon observing any visible emissions in excess of twenty percent (20%) opacity, or excess of forty (40%) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, the Company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading. When in compliance on a daily basis for four (4) consecutive weeks, then the observation frequency shall be decreased to a once-a-week sampling schedule. If an exceedance of the opacity limit is measured, then the observation frequency shall be reverted to the once-a-day sampling schedule.

[45CSR13, R13-0715, A.12] [3S, 8S]

- 4.2.2. The Fluid Bed Dryer and the Rotary dryer shall be observed visually at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40C.F.R. Part 60 Appendix A, Method 22. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, visible emissions evaluations in accordance with 40C.F.R. 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. However a Method 9 evaluation shall not be required if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.
[45CSR13, R13-0715, A.13] [3S, 8S]

4.3. Testing Requirements

- 4.3.1. Tests that are required by the Director to determine compliance with the emission limitations set forth in 4.1.4 and 4.1.5 of this permit shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at 100% of the peak load unless otherwise specified by the Director.
- a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H as set forth in 40 CFR 60, Appendix A.
[45CSR13, R13-0715, B.7] [3S, 8S]
- 4.3.2. With regard to any testing required by the Director, the permittee shall submit to the Director of the division of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.
[45CSR13, R13-0715, B.8] [3S, 8S]
- 4.3.3. Within 180 days of the permit approval, and once per permit term, the permittee shall conduct or have conducted test(s) on the fluid bed and rotary dryers to determine compliance with the Particulate Matter emission limitations as set forth in Sections 4.1.4 & 4.1.5 above. Such Test(s) shall be conducted in accordance with Sections 4.3.1 and 4.3.2 contained herein. The Director, or a duly authorized representative, may witness or conduct such tests. Should the Director exercise this option to conduct such test(s), the operator shall provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR§30-5.1c] [3S, 8S]
Note: Rotary Dryer tested – 6-2-2004, Fluid Bed Dryer tested – 6-3-2004.

4.4. Recordkeeping Requirements

- 4.4.1. Records of quantity and type of fuel used and the fuel sulfur content analysis shall be retained on-site by the permittee for at least five (5) years.
[45CSR13, R13-0715, A.4] [3S, 8S]
- 4.4.2. Compliance with annual limitations of SO₂, NO_x, VOC and CO in Section 4.1.5 shall be demonstrated by recordkeeping of monthly fuel use reports and fuel usage limitations conforming to the following equations. Records will be maintained on-site for at least five years and shall be submitted to the Director upon request.

For SO₂

$$142 F_2 S_2 + 150 F_4 S_4 + 157 F_5 S_5 + 157 F_6 S_6 + 147 F_R S_R = 534,000 \text{ lbs/yr of SO}_2.$$

For NO_x

$$20 F_2 + 20 F_4 + 55 F_5 + 55 F_6 + 19 F_R + 100N + 19 P = 192,700 \text{ lbs/yr of NO}_x.$$

For CO

$$5 F_2 + 5 F_4 + 5 F_5 + 5 F_6 + 5 F_R + 84 N + 3.2 P = 27,507 \text{ lbs/yr of CO.}$$

For VOC

$$0.2 F_2 + 0.2 F_4 + 0.28 F_5 + 0.28 F_6 + 0.22 F_R + 5.5 N + 0.3 P = 2,541 \text{ lbs/yr of VOC.}$$

Where:

F₂ = #2 Fuel Oil use, in 1000 gallons, for last twelve month period.

F₄ = #4 Fuel Oil use, in 1000 gallons, for last twelve month period.

F₅ = #5 Fuel Oil use, in 1000 gallons, for last twelve month period.

F₆ = #6 Fuel Oil use, in 1000 gallons, for last twelve month period.

F_R = Recycled Fuel Oil use, in 1000 gallons, for last twelve month period.

P = Propane use, in 1000 gallons, for last twelve month period.

N = Natural gas use, in million cubic feet of gas, for last twelve month period.

S₂ = Weighted average sulfur content of all #2 Fuel Oil used in last twelve month period (by weight).

S₄ = Weighted average sulfur content of all #4 Fuel Oil used in last twelve month period (by weight).

S₅ = Weighted average sulfur content of all #5 Fuel Oil used in last twelve month period (by weight).

S₆ = Weighted average sulfur content of all #6 Fuel Oil used in last twelve month period (by weight).

S_R = Weighted average sulfur content of all Recycled Oil used in last twelve month period (by weight).

[45CSR13, R13-0715, A.8] [3S, 8S]

- 4.4.3. Records of each shipment of recycled oil chemical analyses, quantity and type of fuel used, maximum fuel rating (BTU/gallon), and the fuel sulfur analysis shall be retained on-site by the permittee for at least five (5) years. The owner or operator shall keep record of quality control and quality assurance program for the fuel analysis. If a certified lab is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory. The permittee will confirm the certified lab fuel analysis results by using an independent certified lab at least once in every six months to analyze the fuel.
[45CSR13, R13-0715, A.10] [3S, 8S]

- 4.4.4. The permittee shall monitor and record the pressure drop across each scrubber (during operation) on a daily basis. These records shall be kept on site for a minimum of 5 years and made available to the Director or Authorized Representative upon request.

[45CSR13, R13-0715, A.11] [40 C.F.R. §64.3(b)] [3S, 8S]

- 4.4.5. Qualified personnel shall perform visual inspections of the scrubbers at least monthly and perform routine maintenance to assure proper operation of the scrubbers. The results of inspection and performance of routine maintenance shall be recorded.

[40 C.F.R. §64.3(b)] [3S, 8S]

- 4.4.6. *General recordkeeping requirements.* (1) The owner or operator shall comply with the recordkeeping requirements specified in 40 C.F.R. §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40CFR64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 C.F.R. §64.9(b)] [3S, 8S]

4.5. Reporting Requirements

- 4.5.1. *General reporting requirements.* (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii) of this chapter.

(2) A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a)] [3S, 8S]

4.6. Compliance Plan

- 4.6.1. N/A

5.0 Source-Specific Requirements [NSPS Sources]

- a) Silica sand storage silos (Stacks # 28, 29 & 33)
- b) Bulk bagging operation at ground sand packaging (Stack # 34)
- c) Five Rotex screens at New Screen Tower (Stack # 36)
- d) Five micron bagger and associated equipment (Stacks #11, 37 and 38)
- e) Trash screen at Fluid Bed Dryer (Stack # 25)
- f) Bulk sand bagger and associated equipment at the Wet Float Plant (Stack #9)
- g) Two Rotex screens at the Wet Float Plant (Stack # 9)
- h) Wet ball mill (Denver)
- i) Microsizer #3 (MS-20) and Handling Equipment (Stack # 41)

5.1. Limitations and Standards

- 5.1.1. (a) The permittee shall not discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
- (1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
 - (2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of 40 C.F.R. § 60.676 (c), (d), and (e).
- (b) The permittee shall not discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.
- (c) The permittee shall not discharge into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.
- (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
- (e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:
- (1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40CFR§60.671. *Vent* means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

Emission Source	Building	Building ID
Denver Ball Mill at Wet Process	Wet Process Plant	#4
Bulk Sand Bagger (BFS) and 2 Rotex Screens at Float Plant	Float Plant	#17
5 Micron Bagger Operation at 5 Micron Classification	5 Micron Classification	# 12
Five Rotex Screens at New Screen Tower	New Screen Tower	#7
Bulk Bagging Operation at Ground Sand Packaging	Ground Sand Packaging	#14

- (2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.
- (f) Permittee shall not discharge into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

- (g) Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of this section.
- (h) Permittee shall not discharge into the atmosphere any visible emissions from:
 - (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.
 - (2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.

[45CSR16; 40 C.F.R. 60, Subpart OOO] [40 C.F.R. § 60.672]

5.1.2. The following emission limits shall not be exceeded :

Emission Source	Emission Point ID	Allowable PM Emissions (PPH)
Silica Sand Storage Silos		
¹ Storage Silo #1- #4	1e (Stack #33)	0.2 ⁴
² Storage Silo #5	5e (Stack #29)	0.05 ⁴
³ Storage Silo #6	6e (Stack #28)	0.05 ⁴

¹ In original construction, each storage tank #1-#4 was equipped with separate baghouses. The four baghouses were replaced by one cartridge filter in 1998 according to PD99-127.

² In original construction, storage tank #5 was equipped with a baghouse. The baghouse was replaced by a cartridge filter.

³ In original construction, storage tank #6 was equipped with a baghouse. The baghouse was replaced by a cartridge filter. In addition, storage tank is controlled by the same cartridge filter as storage tank #7 (see Permit No. R13-1970).

⁴ Allowable emissions were originally established in Permit No. R13-750 and revised in PD99-127.

[45CSR13, R13-750] [Stacks 28, 29 &33]

5.1.3. Ground Sand Packaging/Loading

- 5.1.3.1. The maximum process weight rate for the permitted facilities (Ground Sand Packaging/Loading) shall not exceed 10 tons per hour.

[45CSR13, R13-991] [Ground Sand Packaging/Loading]

- 5.1.3.2. The particulate emission rate for Emission point 1e {Bulk Bagger (PACKR5), Stack # 34} as defined in Permit application No. 991, shall not exceed 0.1 pounds per hour.

[45CSR13, R13-991] [Stack # 34, Emission Point 1e]

- 5.1.3.3. The particulate emission rate for Emission point 2e (Room Venting, Stack # 34), as defined in Permit application No. 991, shall not exceed 0.5 pounds per hour.

[45CSR13, R13-991] [Stack # 34, Emission Point 2e]

Note : In original construction, emission points 1e and 2e were controlled by separate baghouses. Baghouses were replaced by one cartridge filter control device. PD ISSUED 5-16-94.

5.1.4. 5 Micron Bagging System

- 5.1.4.1. Emissions from Mikropul cartridge baghouse Model CFH-6-V-6”B” Emission point ID No. 37 (Stack # 37) and vented through Air Pollution Control Device ID No. 1C, shall not exceed 0.2 pounds of particulate matter per hour (lb./hr.).

[45CSR13, R13-1917, A.1] [Stack # 37]

5.1.4.2 The maximum amount of processed material charged into the feed bin (air pollution source 6S){5 Micron feed Bin}, return bucket elevator (top) (air pollution source 7S)[ELEV 16]and return bucket elevator (bottom) (air pollution source 8S) {ELEV 17} shall not exceed 37.5 tons per hour (TPH). **[45CSR13, R13-1917, A.2] [6S, 7S, 8S]**

5.1.4.3. Emissions from Mikropul Cartridge baghouse, Model CFH-6-V-12"B", Emission Point ID No. 38 (Stack # 38), and vented through Air Pollution Control Device ID No. 2C, shall not exceed 0.2 pounds of particulate matter per hour (lb/hr).
[45CSR13, R13-1917, A.3] [Stack # 38]

5.1.4.4. The maximum amount of processed material charged into the bulk storage bin (air pollution source 2S), product bin (air pollution source 1S) [Bin 5] , bulk loading spout (air pollution source 3S) [Bin 4], the bagger bin (air pollution source 4S) [Stone Container Bagger bin], and stone container model 988 DM single spout bagger (air pollution source 5S) [PACKR7] shall not exceed 35.5 tons per hour (TPH).
[45CSR13, R13-1917, A.4] [1S to 5S]

5.1.5. Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Source	Emission Point ID No.	Allowable PM Emissions	
		(PPH)	(TPY)
Three 100-ton storage silos ¹	Storage Silos #7, #8, #9 (E1) (Stack #28). Mikropul Horizontal Cartridge Dust Collector - #CFH-24-T Pulse Type	0.70 ^{2, (a)}	3.07 ^{2, (b)}

¹ Storage Tank #7 & #8 have been installed at present. Storage Tank #9 has not been installed.

² Emission limitations are included in permit No. R13-1970 and are based on specific cartridge filter equipment manufacturer and specifications submitted with Permit R13-1970. At present, the control equipment (cartridge filter) for Storage Tank #7 is a Torit Model No. #2DFA-155. This cartridge filter also controls emissions from Storage Tank #6 (see Permit No. R13-750). The cartridge filter was tested on 10/18/05 as part of the requirements of the permit.

(a) Based on a PM emission rate of 0.022 grains/dscf (0.05grams/dscm) and a maximum dust collector gas flow rate of 3,715 dcfm.

(b) Based on 8,760 hours of operation per year.

[45CSR13, R13-1970, A.1] [Stack # 28]

5.1.6. SCREN 16 (45CSR13 Permit No. R13-2015)

5.1.6.1. Particulate Matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Equipment	Equipment ID Number	Emission Limitations	
		lb/hr	TPY
Trash Vibrating Screen (Stack # 25)	TS1 (SCREN 16)	1.0	4.0 <u>4.4</u>

[45CSR13, R13-2015, A.1] [Stack # 25]

5.1.6.2. In accordance with the requirements of 40CFR60, Subpart OOO, the maximum particulate (PM) emissions from air pollution control device CF#25 shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams per dry standard meter).

[45CSR13, R13-2015, A.2] [Stack # 25]

5.1.6.3. The maximum hourly and annual rate of sand to the Trash Vibrating Conveyor (SCREEN), Equipment ID No. TS1(SCREEN 16), shall not exceed 220.0 tons/hour and 1,927,200 tons/year.
[45CSR13, R13-2015, A.3] [SCREEN16]

5.1.6.4. The Trash Vibrating Conveyor (SCREEN), Equipment ID No. TS1, shall be controlled at all times of operation with a cartridge filter, Control Equipment ID No. CF#25.
[45CSR13, R13-2015, A.4] [CF#25]

5.1.6.5. The permittee shall operate the cartridge filter, Control Equipment ID No.CF#25, as outlined in Permit Application R13-2015.
[45CSR13, R13-2015, A.5] [CF#25]

5.1.7. Five Rotex Screens at the New Screen Tower

5.1.7.1 The maximum hourly rate of sand to the five Rotex Screens (Equipment ID Nos.:#1 - #5; Sources ID Nos.: 1S - 5S) shall not exceed 75 TPH per screen and 375 TPH total.
[45CSR13, R13-2145, A.1] [Rotex Screens – 1S-5S]

5.1.7.2 The maximum annual processing rate of sand to the five Rotex Screens (Equipment ID Nos.: #1 - #5; Sources ID Nos.: 1S - 5S) shall not exceed 3,285,000 TPY total.
[45CSR13, R13-2145, A.2] [Rotex Screens – 1S-5S]

5.1.7.3 The permittee shall operate the air pollution control device, the Torit DFT 2-8-155 Pulse Type Cartridge Dust Collector (Equipment ID No. 1C; Emission Point ID No. 1E (Stack #36), as outlined in Permit Application R13-2145.
[45CSR13, R13-2145, A.3] [Stack # 36]

5.1.7.4 In accordance with the requirements of 40 CFR 60, Subpart OOO, the maximum particulate (PM) emissions from the air pollution control device, the Torit DFT 2-8-155 Pulse Type Cartridge Dust Collector (Emission Point ID No. 1E – Stack #36), shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams/dry standard meter).
[45CSR13, R13-2145, A.4; 40 C.F.R. § 60.672; 45CSR16] [Stack # 36]

5.1.7.5 Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Point ID No.	Control Equipment	Emission Limitation	
		Hourly (PPH)	Annual (TPY)
Five Rotex Screens (1S-5S)[SCREEN 7-9, 14-15] (1E) (Stack #36)	Torit DFT 2-8-155 Pulse Type Cartridge (Equipment ID No. 1C) (CF #36)	0.5 ^(a)	2.2 ^(b)

^(a) Based on a PM emission rate of 0.022 grains/dscf (0.05grams/dscm) and a maximum dust collector gas flow rate of 2,652 dcfm.

^(b) Based on 8,760 hours of operation per year.

[45CSR13, R13-2145, A.5] [Stack # 36]

5.1.8. Two Rotex Screens at the Wet Float Plant

5.1.8.1. The maximum hourly rate of sand to the two (2) new Rotex Screens (Equipment ID Nos.: 1s and 2s) (SCREN 17 & SCREN 18) shall not exceed 50 TPH per screen and 100 TPH total.

[45CSR13, R13-2423, A.1] [SCREN 17&18]

5.1.8.2 The maximum annual rate of sand to the two (2) new Rotex Screens (Equipment ID Nos.: 1s and 2s) (SCREN17 & SCREN 18) shall not exceed 438,000 TPY per screen and 876,000 TPY total.

[45CSR13, R13-2423, A.2] [SCREN 17&18]

5.1.8.3. The permittee shall operate the air pollution control device, the Torit Model No. 4DF32-155 Pulse Type Cartridge Dust Collector (Emission Point ID No. 1E) (Stack #9), as outlined in Permit Application R13-2423.

[45CSR13, R13-2423, A.3] [Stack # 9]

5.1.8.4. In accordance with the requirements of 40 CFR 60, Subpart OOO, the maximum particulate (PM) emissions from the air pollution control device, the Torit Model No. 4DF32-155 Pulse Type Cartridge Dust Collector (Emission Point ID No. 1E) (Stack #9), shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams per dry standard meter).

[45CSR13, R13-2423, A.4; 40 C.F.R. § 60.672; 45CSR16] [Stack # 9]

5.1.8.5. Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Point ID No.	Control Equipment	Emission Limitations	
		Hourly ⁽¹⁾ (PPH)	Annual ⁽²⁾ (TPY)
SCREN 17, SCREN 18 (1E) (Stack #9)	Torit Model No. 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No. 1C) (CF #9)	1.4	6.0
(1) Based on a PM emission rate of 0.022 grains/dscf (0.05 grams/dscm) and a maximum dust collector gas flow of 7,212 dcfm. (2) Based on 8,760 hours of operation per year.			

[45CSR13, R13-2423, A.5] [Stack # 9]

5.1.9. Bulk bagging operation at the Wet Float Plant [45CSR13 (Permit No. R13-2299)]

5.1.9.1. The maximum hourly and annual processing rates of sand through the bulk sand bagger shall not exceed 30 TPH and 262,800 TPY, based on 8,760 hours of operation per year.

[45CSR13, R13-2299, A.1] [PACKR8]

5.1.9.2. The permittee shall operate the air pollution control device, the Torit Model Number 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No. 1C; Emission Point ID No. 1E - Stack #9), as outlined in Permit Application R13-2299.

[45CSR13, R13-2299, A.2] [Stack # 9]

5.1.9.3. In accordance with the requirements of 40 CFR 60, Subpart OOO, the maximum particulate (PM) emissions from the air pollution control device, the Torit Model Number 4DF32-155 Pulse Type Cartridge Dust Collector (Emission Point ID No. 1E - Stack #9), shall not exceed 0.022 grains per dry standard cubic foot (0.05 grams/dry standard meter).

[45CSR13, R13-2299, A.3; 40 C.F.R. § 60.672; 45CSR16] [Stack # 9]

5.1.9.4. Particulate matter (PM) emissions shall not exceed the following hourly and annual emission limits:

Emission Point ID No.	Control Equipment	Emission Limitation	
		Hourly (PPH)	Annual (TPY)
SCREW 31, PACKR 8 (1E) (Stack #9)	Torit Model Number 4D F32-155 Pulse Type Cartridge (Equipment ID No. 1C) (CF #9)	1.37 ^(a)	6.0 ^(b)

^(a) Based on a PM emission rate of 0.022 grains/dscf (0.05grams/dscm) and a maximum dust collector gas flow rate of 7,239 dcfm.

^(b) Based on 8,760 hours of operation per year.

[45CSR13, R13-2299, A.4] [Stack # 9]

5.1.10. Microsizer #3 (MS-20) and Handling Equipment [45CSR13 Permit No. R13-2595]

5.1.10.1. The maximum quantity of material to be processed by the Microsizer #3 and Handling Equipment shall be limited to the following:

Equipment Source (Emission Source ID)	Maximum Hourly Rate (ton/hr)
Microsizer #3 (Stack #41)	25
Airslide 100 (Stack #41)	8
Airslide 200 (Stack #41)	8
Surge Hopper (Stack #41)	8
Tech Air Pumping Station (Stacks #28 & 29)	8

[45CSR13, R13-2595 (Condition A.1.)] [Stack # 28, 29 & 41]

5.1.10.2. Maximum particulate matter emissions to the atmosphere shall not exceed the following:

Emission Point ID#	Emission Source	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Stack #41	Microsizer #3	1.20	5.26
Stack #41	Airslide 100	0.15	0.66
Stack #41	Airslide 200	0.15	0.66
Stack #41	Surge Hopper	0.10	0.43
Stack #28 & 29	Tech Air Pumping Station	0.40	1.75

[45CSR13, R13-2595 (Condition A.2.)] [Stack # 28, 29 & 41]

5.1.10.3. The following fugitive dust control measures as specified in Permit Application R13-2595 shall be installed, maintained, and operated at all times when the facility is in operation in order to minimize fugitive particulate matter emissions:

Emission Source ID#	Air Pollution Control Device	Air Pollution Control Device Efficiency
Microsizer #3	Torit DFT2-4-155 Baghouse (2C)	99.9%
Airslide 100	Torit DFT2-4-155 Baghouse (2C)	99.9%
Airslide 200	Torit DFT2-4-155 Baghouse (2C)	99.9%
Surge Hopper	Torit DFT2-4-155 Baghouse (2C)	99.9%
Tech Air Pumping Station	Mikropul 8204B Baghouse (Tank 5) Torit DF2DF4 (Tanks 6 and 7) (3C)	99.9% 99.9%

[45CSR13, R13-2595 (Condition A.3.)] [Baghouses 2C & 3C; Stack # 28, 29 & 41]

5.1.10.4. The stabilized static pressure loss across baghouse 1C and 2C shall remain between 0.5 to 6.0 inches of water. **[45CSR13, R13-2595 (Condition A.4.)] [Baghouses 1C & 2C; Stack # 9 & 41]**

5.1.10.5. Except during startup and shutdown, opacity from baghouses 2C and 3C shall not exceed 10 percent based on a six minute block average. In order to determine compliance with this limit the permittee shall conduct monthly visual emission observations in accordance with Method 22 of 40 CFR 60, Appendix A for stacks #41, #28 and #29. These observations shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40CFR60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, the permittee shall conduct an opacity evaluation in accordance with 40CFR60 Appendix A, Method 9, within 24 hours. A 40CFR60 Appendix A, Method 9 evaluation shall not be required if the visible emission condition is corrected within 24 hours and the units are operated at normal operating conditions with no visible emissions being observed. Records shall be maintained on site reporting the results of each test. Upon observing any visible emissions in excess of twenty percent (20%) opacity, or excess of forty (40%) for any period or periods aggregating more than five (5) minutes in any sixty (60) minute period, the Company shall submit a written report, certified by a responsible official, to the Director of the Division of Air Quality within five (5) days after taking said reading.

[45CSR13, R13-2595 (Condition A.4.)] [Stack # 28, 29 & 41]

5.1.11. The following cartridge filter or baghouse pressure drop ranges obtained from stack test and historical data are an indicator of compliance for the cartridge filter or baghouse to attain the required minimum particulate removal efficiency. Cartridge filter or baghouse pressure drop shall be monitored at least once per day. An excursion shall be defined as when the Cartridge filter or baghouse pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the cartridge filter or baghouse and corrective actions shall be taken to return the pressure drop within the following range:

Control device #	Control Device Description	Indicator Range for Pressure Drop (in H ₂ O)
#9	Donaldson Torit 4DFT-32-155	1.5-4.0
#25	Donaldson Torit DF-4DF-48	1.0-3.6
#28	Donaldson Torit DF-2DF-4	0.6-6.0

#29	Mikropul CFH-18-20-VB	0.5-1.0
#33	Donaldson Torit DF-T4-16	1.4-5.0
#34	Donaldson Torit DF-2DF-4	0.5-5.0
#36	Donaldson Torit DF-T2-8	0.5-2.5
#37	Mikropul CFH-8-20	1.5-5.0
#38	Mikropul CFH-18-20-VB	2.0-4.5
#41	Donaldson Torit DFT2-4-155	0.5-6.0

According to the CAM plan submitted, the differential pressure gauges for the cartridge filter or baghouse shall be operated continuously during operation of the emission units.

[40 C.F.R. §64.3(a)(2)] [Stack # 9, 25, 28, 29, 33, 34, 36, 37, 38 & 41]

5.2. Monitoring Requirements

- 5.2.1. Visible Emissions evaluations will be conducted as specified in Facility-wide requirements 3.2.1, 3.2.2 and 3.2.3.
[45CSR§30-5.1c]
- 5.2.2. The permittee shall monitor and maintain records of daily observations of pressure drop across baghouses 2C and 3C.
[45CSR13, R13-2595, B.9.] [Baghouses 2C & 3C; Stack # 28, 29 & 41]
- 5.2.3. For the purpose of determining compliance with the process rate limitations set forth in 5.1.10.1., the permittee shall maintain monthly and annual records on the processing rate of sand to #3 Micorsizer, Airslide 100, Airslide 200, Surge Hopper, and Tech Air Pumping Station. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS).
[45CSR13, R13-2595, B.6.] [#3 Micorsizer, Airslide 100, Airslide 200, Surge Hopper, and Tech Air Pumping Station]
- 5.2.4. Maintenance records for the air pollution control devices listed in 5.1.10.3. shall be maintained on site for a period of five (5) years. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. At a minimum, the following information shall be documented for each malfunction:
- The equipment involved in the malfunction and the associated cause.
 - Steps taken to correct the malfunction.
 - The steps taken to minimize the emissions during the malfunction.
 - The duration of the malfunction.
 - The increase in emissions during the malfunction.

- f. Steps taken to prevent a similar malfunction in the future.

[45CSR13, R13-2595, B.8.] [Baghouses 2C & 3C; Stack # 28, 29 & 41]

5.3. Testing Requirements

- 5.3.1. The owner or operator shall determine compliance with the particulate matter standards in Section 5.1.1(a) according to Test method and Procedures in 40 C.F.R. §60.675.
[40 C.F.R. §60.675; 45CSR16]

5.4. Recordkeeping Requirements

- 5.4.1. For the purpose of determining compliance with the process rate limitation set forth in Sections 5.1.8.1 and 5.1.8.2, the permittee shall maintain monthly and annual records on the processing rate of sand to the two (2) new Rotex Screens (located at the Float Plant). Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS).
[45CSR13, R13-2423, B.4] [SCREN17 & 18]

- 5.4.2. For the Torit Model No. 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No. 1C-CF#9):
- a. Maintenance records shall be maintained on site for a period of five (5) years. Certified copies of these records shall be made available to the Director or his duly authorized representative upon request.
- b. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of 5 years. Certified copies of these records shall be made available to the Director or his duly authorized representative upon request. At minimum, the following information shall be documented for each malfunction:
- The cause of malfunction.
 - Steps taken to:
 - correct the malfunction.
 - minimize emissions during malfunction.
 - The duration of the malfunction in hours.
 - The estimated increase in emissions during the malfunction.
 - Any changes/modifications made to equipment and/or procedures that will help prevent future recurrence of the malfunction.

[45CSR13, R13-2423, B.5] [CF#9]

- 5.4.3. For the purpose of determining compliance with the process rate limitation set forth in Section 5.1.9.1, the permittee shall maintain monthly and annual records on the processing rate of sand to the bulk sand bagger (located at the Float Plant). Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S. Silica Company computerized Production Tracking Data System (PTDS).
[45CSR13, R13-2299, B.4] [PACKR8]

- 5.4.4. Maintenance records for the Torit Model Number 4DF32-155 Pulse Type Cartridge Dust Collector (Equipment ID No.: 1C-CF#9; Emission Point ID No.: 1E-Stack#9), must be maintained. Records shall be maintained on site for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-2299, B.5] [Stack#9]

- 5.4.5. For the purpose of determining compliance with the process rate limitation set forth in Section 5.1.7.2, the permittee shall maintain monthly and annual records on the processing rate of sand to the five (5) Rotex Screens (located at the New Screen Tower). Certified copies of said records shall be made available to the director or his/her duly authorized representative upon request. The Monthly and annual sand processing records may be maintained using the U.S.Silica company computerized Production Tracking Data System (PTDS)
[45CSR13, R13-2145, B.4] [Rotex Screens – 1S-5S]
- 5.4.6 For the Torit DFT 2-8-155 Pulse Type Cartridge Dust Collector (Equipment ID No.: 1C-CF#36; Emission Point ID No.: 1E-Stack # 36):
- a. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request.
- b. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of 5 years. At minimum the following information must be documented for each malfunction:
- The cause of malfunction.
 - Steps taken to:
 - correct the malfunction.
 - minimize emissions during malfunction.
 - The duration of the malfunction in hours.
 - The estimated increase in emissions during the malfunction.
 - Any changes/modifications made to equipment and/or procedures that will help prevent future recurrence of the malfunction.
- [45CSR13, R13-2145, B.5] [Stack # 36]**
- 5.4.7. For the purpose of determining compliance with the emission limits as set forth in Sections 5.1.6.1 and 5.1.6.2, the permittee shall maintain all records that are required herein. Said records shall be maintained on site for a period of five (5) years and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-2015, B.1] [Stack # 25]
- 5.4.8. For the purpose of determining compliance with the process weight rate limitations set forth in Section 5.1.6.3 the permittee shall maintain monthly and annual records on the processing rate of sand to the Trash Vibrating Screen. Compliance with the monthly and annual process weight rate limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the process weight rate at any given time for the previous twelve (12) consecutive months. Said records shall be maintained on site for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. The monthly and annual sand processing records may be maintained using the U.S.Silica Company computerized Production Tracking Data System (PTDS)
[45CSR13, R13-2015, B.2] [SCREN16]
- 5.4.9. For the purpose of determining compliance with the conditions set forth in Section 5.1.6.4, the permittee shall maintain certified annual records that contain at a minimum the following:
- Hours of Operation when the Trash Vibrating Screen is operating without the required control device (Cartridge Filter).
- Said records shall be maintained on site for a period of five (5) years. Certified copies of these records shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR13, R13-2015, B.3] [CF#25]

- 5.4.10. For the purpose of determining compliance with the conditions set forth in Section 5.1.6.5, the permittee shall meet the following requirements for the control device CF#25:
- a. Maintenance records shall be maintained on site for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request.
 - b. Malfunctions shall be documented in writing and records of these malfunctions maintained at the facility for a period of five (5) years. Certified copies of said records shall be made available to the Director or his/her duly authorized representative upon request. At minimum, the following information shall be documented for each malfunction:
 1. The cause of malfunction
 2. Steps taken to:
 - correct the malfunction
 - minimize emissions during malfunction
 3. The duration of the malfunction in hours.
 4. The estimated increase in emissions during the malfunction.
 5. Any changes/modifications made to equipment and/or procedures that will help prevent future recurrence of the malfunction.
- [45CSR13, R13-2015, B.4] [CF#25]**
- 5.4.11. The permittee shall keep records of monitoring requirements of Section 5.2 as specified in Sections 3.4.1, 3.4.2. **[45CSR§30-5.1c]**
- 5.4.12. The permittee shall monitor and record the differential pressure drop across each fabric filter (during operation) on a daily basis.
[40 C.F.R. §64.3(b)] [CF # 9, 25, 28, 29, 33, 34, 36, 37, 38 & 41]
- 5.4.13. Qualified personnel shall perform visual inspections of the fabric filters control devices at least monthly and perform routine maintenance to assure proper operation of the fabric filters. The results of inspection and performance of routine maintenance shall be recorded.
[40 C.F.R. §64.3(b)] [CF # 9, 25, 28, 29, 33, 34, 36, 37, 38 & 41]
- 5.4.14. *General recordkeeping requirements.* (1) The owner or operator shall comply with the recordkeeping requirements specified in 40 C.F.R. §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40CFR64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.
[40 C.F.R. §64.9(b)] [CF # 9, 25, 28, 29, 33, 34, 36, 37, 38 & 41]

5.5. Reporting Requirements

- 5.5.1. (a) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Section 5.1.1 of this Permit, including reports of opacity observations made using Method 9 to demonstrate compliance with Section 5.1.1 (b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with Section 5.1.1(e).

(b) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to Section 5.1.1 (h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in Section 5.1.1 (b) and the emission test requirements of 40 CFR 60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in Section 5.1.1 (h).

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

[45CSR16; 40 C.F.R. §60.676]

5.5.2. (a) *General reporting requirements.* (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii) of this chapter.

(2) A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a)] [CF # 9, 25, 28, 29, 33, 34, 36, 37, 38 & 41]

5.6. Compliance Plan

5.6.1. N/A

6.0 Source-Specific Requirements [Non- NSPS Sources],

- a) Primary Crushing Plant (Stack # 1).
- b) Secondary Crushing Plant (Stack # 2).
- c) Wet Processing Operations Plant (Rod Mill Building) except CONV54, MILL8, SCREN16
- d) Screening and Unground Sand Processing except SCREN 7-9, 14-15 (Stack #6, 7, 27 &40)
- e) Milling Process (Stack # 10, 11, 12 &39).
- f) Classification (10/15/30/40 Micron) (Stack # 11 &12)
- g) 5 Micron Classification (Includes only PEMCO Elevator, PACKR 3, 4 (Stack # 13 & 20)
- h) Wet Float Plant except SCREN 17&18, Elev 20, Screw 31, Packr 8
- i) Storage Structures except Supersil storage silos #1 to #4, Minusil Storage Silos #5 to #7 (Stack # 6, 7, 9, 13 & 27).

6.1. Limitations and Standards

6.1.1. The emission limitations are as shown in the table below :

Emission Unit	Emission Point ID	Allowable PM Stack Emissions (Type 'a' Source Operation) (PPH)
CRUSH 2, CONV2, CONV3	Stack # 1(CF#1)	50
CRUSH 3	Stack # 2(Wsc#2)	50
VIBFD5, ELEV4, CONV 39-41, CONV 29, CONV 30, Tank #7 and Tank # 8 loadouts.	Stack # 6(CF #6)	43
SCREN 10-13, SCREN 2-4, ELEV1, ELEV2, ELEV3, CONV 31, CONV33, Tank # 13 and tank #8 vents	Stack#7 (CF#7)	43
CONV 51, Pulverizer tank # 19, Pulverizer tank # 20, # 2 Feed Silo, Tanks #9-#12 vents and loadouts, Steel Tank # 21 Vent and Loadout, SPOUT 1 to 3	Stack#27(CF#27)	43
PACKR1.	Stack # 40	43
SCREW3, #1 Mill Feed Bin, SCREW6, AIRSD7, ELEV 6, ELEV 7, # 2 Mill Feed bin, FEEDB1 and FEEDB2	Stack # 10	37
Elev 14	Stack # 39	40
#5 Mill Feed Bin, FEEDB5, ELEV10, #6 Mill Feed Bin, FEEDB6, AIRSD3, ELEV11, BIN7, #1 AND #2 PUMPS, #2 MICROSIZER FEED BIN, AIRSI 13, TAILINGS BINS	Stack # 12	37
PEMCO Elev, FCP Tank VENT, and PEMCO tank VENT, SPOUT6	Stack # 13	47
Packr 3 & 4	Stack # 20	28
SCREW4(3-4 Screw Conveyor), #3 Mill Feed Bin, # 4 Mill Feed Bin, SCREW7, AIRSD8, PNEU4, ELEV8, ELEV9, FEEDB3, FEEDB4, AIRSD2, SCREW5, PNEU2, ELEV16, # 1 Microsizer Feed Bins, AIRSD12, and SCREW5.	Stack # 11	37

[45CSR§7-4.1] [Stacks 1, 6, 7, 10, 11, 12, 13, 20, 27, 39, 40, Wsc#2]

6.1.2. The following Non-NSPS Fabric Filter pressure drop ranges obtained from stack test and historical data are an indicator of compliance for the filters to attain the required minimum particulate removal efficiency. Filter pressure drop shall be monitored at least once per day. An excursion shall be defined as when the filter pressure

drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the filter and corrective actions shall be taken to return the pressure drop within the following range:

Control device #	Control Device Description	Indicator Range for Pressure Drop (in H ₂ O)
#1	Donaldson Torit DF-T4-32	1.4-3.0
#6	Donaldson Torit DFA-155	2.0-5.0
#7	Donaldson Torit DFT-32-SH)	3.0-5.5
#10	Mikropul CFH 40T-20-B	2.0-3.5
#11	Mikropul CFH 40T-20-B	2.0-3.5
#12	Mikropul CFH 40T-20-B	1.5-4.0
#13	Donaldson Torit DF-T3-24	1.8-4.5
#20	Donaldson Torit DF-T4-16	1.6-5.0
#27	Donaldson Torit DF-T2-8	2.0-4.5
#39	Mikropul CFH 8-20-V	1.0-3.0
#40	Donaldson Torit DF-T2-8	0.75-2.2

According to the CAM plan submitted, the differential pressure gauges for the filters shall be operated continuously during operation of the emission units.

[40 C.F.R. §64.3(a)(2)] [Stacks #1, 6, 7, 10, 11, 12, 13, 20, 27, 39, 40]

- 6.1.3. The following scrubber pressure drop range obtained from stack test and historical data is an indicator of compliance for the scrubber to attain the required minimum particulate removal efficiency. Scrubber pressure drop shall be monitored at least once per day. An excursion shall be defined as when the scrubber pressure drop falls outside the following range. When an excursion occurs, the permittee shall conduct an inspection of the scrubber and corrective actions shall be taken to return the pressure drop within the following range:

Control device #	Control Device Description	Indicator Range for Pressure Drop (in H ₂ O)
Wsc#2	Wet Scrubber	1.5-7.0

According to the CAM plan submitted, the pressure drop across the wet scrubber shall be measured continuously during operation of the emission units.

[40 C.F.R. §64.3(a)(2)] [Wsc#2]

6.2. Monitoring Requirements

- 6.2.1. Visible emissions evaluations will be conducted as specified in facility-wide requirements 3.2.1., 3.2.2., and 3.2.3.
[45CSR§30-5.1c]
- 6.2.2. The wet scrubber Wsc#2 shall be observed daily during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions are observed, visible emissions evaluations in accordance with 45CSR7A shall be conducted as soon as practicable, but no later than one week from the time of the observation. A visible emissions evaluations in accordance with 45CSR7A shall not be required under condition Section 6.2.2 if the visible emissions condition is corrected in a timely manner; the scrubber is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.
[45CSR§30-5.1c] [Wsc#2]

6.3. Testing Requirements

N/A

6.4. Recordkeeping Requirements

- 6.4.1. Recordkeeping will be conducted as specified in facility-wide requirements 3.4.1., 3.4.2., 3.4.3 and 3.4.4.
[45CSR§30-5.1c]
- 6.4.2. The monitoring required in sections 6.2.2 will be recorded.
[45CSR§30-5.1c]
- 6.4.3. The permittee shall monitor and record the differential pressure drop across each fabric filter and the wet scrubber during operation on a daily basis.
[40 C.F.R. §64.3(b)]
- 6.4.4. Qualified personnel shall perform visual inspections of the fabric filters and wet scrubber control devices at least monthly and perform routine maintenance to assure proper operation of the fabric filters and wet scrubber. The results of inspection and performance of routine maintenance shall be recorded.
[40 C.F.R. §64.3(b)]
- 6.4.5. *General recordkeeping requirements.* (1) The owner or operator shall comply with the recordkeeping requirements specified in 40 C.F.R. §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40CFR64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- (2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.
[40 C.F.R. §64.9(b)]

6.5. Reporting Requirements

6.5.1 Reporting will be conducted as specified in facility-wide requirements 3.5.6 and 3.5.8.
[45CSR§30-5.1c]

6.5.2. *General reporting requirements.* (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with 40 C.F.R. §70.6(a)(3)(iii) of this chapter.

(2) A report for monitoring under this part shall include, at a minimum, the information required under 40 C.F.R. §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §64.9(a)]

6.6. Compliance Plan

6.6.1. N/A

7.0 Source-Specific Requirements [Miscellaneous Material Handling Equipment - VIBFD1, CONV1, CONV8, CONV21, CONV23, CONV24, VIBFD4]

7.1. Limitations and Standards

- 7.1.1. Each emission unit with a visible emissions limit contained in Section 3.1.9 shall be observed visually at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions from any of the emission unit are observed during these weekly observations, or at any other time, that appear to exceed the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 45CSR7A shall be conducted as soon as practicable, but no later than two weeks from the time of the observation. A 45CSR7A evaluation shall not be required under condition Section 7.1.2 if the visible emissions condition is corrected in a timely manner; the emission unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded. **[45CSR§30-5.1c]**
- 7.1.2. If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of the allowable visible emission requirements for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 45CSR7A. If subsequent visible emissions evaluations indicate visible emissions less than the allowable visible emission requirement for the emission unit for three consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of condition 7.1.2 in lieu of those established in this condition. **[45CSR§30-5.1c]**

7.2. Monitoring Requirements

- 7.2.1. N/A

7.3. Testing Requirements

- 7.3.1. N/A

7.4. Recordkeeping Requirements

- 7.4.1. N/A

7.5. Reporting Requirements

- 7.5.1. N/A

7.6. Compliance Plan

- 7.6.1. N/A